IMPROVING NEIGHBORHOOD CONNECTIONS

ACCELERATE 465 I-465 WEST LEG RECONSTRUCTION PROJECT





Indianapolis, Indiana I-465 from SR 67 (Kentucky Avenue) to 56th Street

Indiana Department of Transportation (INDOT)

Design Guidelines published 2005

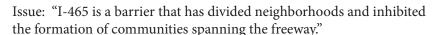
Project Type: Urban Freeway

PURPOSE

The purpose of the project is the reconstruction of a 12-mile segment of beltway around Indianapolis to provide increased capacity and replace deteriorated infrastructure. Mainline roadway, interchanges, and bridges all required reconstruction as a part of this estimated \$500+ million project. A primary goal identified by the Community Advisory Group (CAG) was to "improve connectivity." This case study focuses on the process and the innovative design solution generated which successfully achieves this goal, as part of the development of design guidelines for the larger project.

DESCRIPTION

Within the early stages of project initiation and exploration, the CAG participated in the identification of project Issues and Goals. Five were identified, and none more strongly expressed as critical to the community than the issue of "Isolated Communities." The Issue and Goal were stated as:

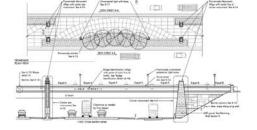


Goal: "Provide a convenient, inviting, and accessible system of streets, trails, and walks spanning I-465 to improve neighborhood connections."

This desire to re-establish community connections was further emphasized within the CAG-generated project Mission Statement:

"Create a new and attractive I-465 corridor, with a strong identity, that enhances the lives of residents and the experiences of travelers by improving the sense of safety, well-being, and community"

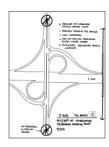
During early planning and design of interchanges and neighborhood street over-crossings, the design team explored multiple design options for bridges which focused on accomplishing the community's goal. Their efforts were guided by the CAG's specific direction that bridges be designed incorporating

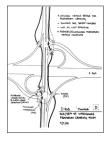


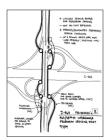










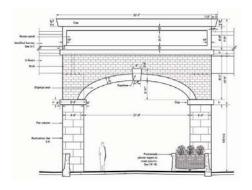


safe and convenient automobile, pedestrian and bicycle facilities. Providing safe pedestrian movements over and under I-465 at partial cloverleaf interchange configurations proved to be a significant challenge to INDOT engineers and the design team. This condition occurred at five locations within the project.

INDOT and the City of Indianapolis initially followed tradition by locating sidewalks and trails within the boulevard areas of streets. However, as they approach the at-grade exit and entrance ramps of I-465, conflicts between motorists and pedestrians occurred. To attempt to resolve this issue, several alternative concepts were generated by the design team including dedicated pedestrian tunnels, integrated pedestrian bridges, re-routing of trail and sidewalk systems, and removing pedestrian crossings from vehicle bridges entirely.

The concept that seemed to best resolve these conflicts and provide additional enhancements was a shared center median sidewalk and trail, or pedestrian promenade. The design features a 28-foot total width median with barrier-edged raised planters, and ornamental pedestrian lighting and special pavements. Pedestrian crossings of the local street from the boulevard to the median are accomplished safely at the signalized intersections. This innovative solution not only solves safety concerns, it provides for a unique opportunity for community-level enhancement and pedestrian experience.

PUBLIC ENGAGEMENT





Public engagement and participation was primarily accomplished through the CAG. Its members represent a diverse cross-section of the community—including business owners, neighborhood associations, city and state departments, township councils, tourism boards and arts councils, commerce chambers and others. Their participation in this public involvement process was critical to the overall success and acceptance of the I-465 project. Their participation was also critical as designs for the pedestrian promenade were developed. A community-led push for this safe and accommodating pedestrian system was instrumental in this concept's preliminary acceptance by INDOT and other agencies.

Meetings were held nearly every month over a 13 month period, and were guided by the projects' Public Involvement team. Meetings follow a subject-specific agenda, with topical discussions following requirements of the project's development schedule. The format for receiving input from the CAG was through a review and selection of design team-prepared design alternatives. Discussions within meetings generated a majority determined preferred direction for design.

Additional information was provided to the community through three other methods. Neighborhood information meetings were held, where specific project concerns were received and addressed. A public open house or Information Fair took place, where the public reviewed preliminary plans and had an opportunity to both learn about the project and offer opinions and solutions. An INDOT sponsored web site also provided the community with an opportunity to provide feedback.

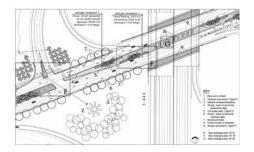




CONTEXT SENSITIVE SOLUTIONS APPROACH

INDOT promotes a CSS approach to the design of transportation projects that broadly considers social, economic, and environmental issues. This approach could not have been accomplished without close coordination that occurred between design disciplines along with significant involvement of stakeholders. Stakeholders representing businesses, neighborhoods, various government agencies, and municipalities formed the CAG, and worked within a public participation process to provide guidance and set development goals for the project. These goals, while considering the transportation system improvement requirements, enhance the livability of adjacent communities and neighborhoods while attempting to improve the environmental quality of the area.

OUTCOME



This project is currently in the design phase. Preliminary plans, studies, reports, and guidelines have been developed and are being evaluated by INDOT, FHWA, the City of Indianapolis, and other involved agencies. The result of the CSS process is the CSS Design Guidelines, a document that illustrates design direction for all corridor components, including specific requirements for the pedestrian promenades. This document will primarily be used by the five segment design consultants for their preparation of final plans and specifications.

As the project is not scheduled for completion until 2010, an outcome and any measurement of success is many years away. However, INDOT and the involved stakeholders currently are expressing satisfaction with the CSS approach and recommendations.

CHALLENGES

Accelerate 465 was the first project that INDOT attempted to fully utilize a CSS design approach. The biggest challenge was incorporating community interests into the design when the ability to coordinate with the community was constrained by an accelerated schedule and a reliance on professionals to make most design development decisions.

Many design development decisions that a typical CSS approach would have allowed stakeholders to have participated in more fully, were decided by project designers and management and then presented to the public for approval due to schedule constraints and administrative habit. Fortunately, the design team was composed of experienced professionals from multiple disciplines who, having worked on similar projects using CSS practices in other communities, were able to act as community advocates even when direct community input was not available.

FUNDING

The project is being funded with federal, state and municipal participation. As this project is currently in the design phase, allocation of funding for the special pedestrian facilities is yet to be determined. It is anticipated, however, that because these enhanced facilities are above and beyond INDOT standards, and because they provide for use at the neighborhood level, the City of Indianapolis will need to contribute to the funding. Additionally, there have been preliminary discussions concerning the funding for maintenance and upkeep of the improvements within the promenades.





- **LESSONS LEARNED** To ensure these types of unique and innovative facilities will meet engineering design criteria, involve all decision-makers early and often in all stages of the project, from concept generation through final design.
 - Projects need a champion! Involve a recognized member of the community who fully understands the importance of the project and embraces the responsibility of seeing it become a reality.
 - Restructure public involvement that allows for true participation in the design process, not a process filtered through or diminished by agency concern for deviating too far from standardization or setting new precedence.
 - Don't be afraid to think outside the box. Challenge the standards and conventional thinking. Explore new solutions that better solve the problem instead of using recognized standards that may be a compromise.
 - Agencies looking to begin utilizing the CSS design approach should consider smaller scale projects as training for larger scale projects.

KEY WORDS

Applicable Project Delivery Stages: Administration, Planning, Design

Applicable Transportation Professionals: Highway Engineers, Structural Engineers, Urban Designers, Landscape Architects, Architects, Artists, Recreational Planners

Applicable Transportation Modes: Highway, Local Street, Bicycle, Pedestrian

Transportation Topics: Visual Quality, Safety, Connectivity, Accessibility, Geometrics, Lighting, Design Speed, Vegetation, Recreation

CONTACTS

Gary Mroczka, PE, Chief Design Division Indiana Department of Transportation Room N642 100 North Senate Avenue Indianapolis, IN 46204 317-232-5226 gmroczka@indot.state.in.us

Tom Harrington, ASLA Project CSS Design Lead **HNTB** Corporation 7900 International Drive Minneapolis, MN 55425 952-345-5997 trharrington@hntb.com

Mark Urban, PE Project Manager **HNTB** Corporation 111 Monument Circle, Suite 1200 Indianapolis, IN 46204 317-917-5211 murban@hntb.com

WEB LINKS

http://www.in.gov/dot/div/projects/accelerate465/design/index.html (Accelerate 465 website)



